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Notice of Allowability	Application No.	Applicant(s)	
	10/821,967	SU ET AL.	
	Examiner	Art Unit	
	Ida M. Soward	2822	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Applicants' amendment filed December 7, 2005.
2. ☒ The allowed claim(s) is/are 1,3 and 5-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Ida M. Soward
AU 2822

DETAILED ACTION

This Office Action is in response to the Applicants' amendment filed December 7, 2005.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joe McKinney Muncy on February 17, 2006.

Allowable Subject Matter

Claims 1, 3, 5-20 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art of record does not disclose, make obvious, or otherwise suggest the structure of the applicant's together with the other limitations of the independent claims, such as

in claim 1, "a plurality of independent chip carriers secured on the conducting wire holders, wherein the independent chip carriers have a multi-layer structure, middle

layers of the independent chip carriers being insulators used to separate the semiconductors from the conducting wire holders', a plurality of semiconductor chips secured on the independent chip carriers; a first curved surface made of a portion of the conducting wire holders, wherein the semiconductor chips are placed at a focus of the first curved surface; a plurality of independent connecting components made of another portion of the conducting wire holders; and a second curved surface surrounded by a package body, wherein the semiconductor chips are placed at a focus of the second curved surface”;

in claim 16, “a plurality of independent chip carriers secured on the conducting wire holders; a plurality of semiconductor chips secured on the independent chip carriers; a first curved surface made of a portion of the conducting wire holders, wherein the semiconductor chips are placed at a focus of the first curved surface; a plurality of independent connecting components made of another portion of the conducting wire holders; and a second curved surface surrounded by a package body, wherein the semiconductor chips are placed at a focus of the second curved surface; wherein the first curved surface is coated with a material able to enhance a reflective capability; and

in claim 18, “a plurality of independent chip carriers secured on the conducting wire holders; a plurality of semiconductor chips secured on the independent chip carriers; a first curved surface made of a portion of the conducting wire holders, wherein the semiconductor chips are placed at a focus of the first curved surface; a plurality of independent connecting components made of another portion of the conducting wire holders; and a second curved surface surrounded by a package body, wherein the

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semiconductor chips are placed at a focus of the second curved surface; wherein the second curved surface is made of or coated with a material able to enhance a reflective capability".

The dependent claims being further limiting and definite are also allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patent are cited to further show the state of the art with respect to optical semiconductor devices:

DiLeo et al. (4,209,358)	Durocher et al. (US 6,614,103 B1)
Hsuan et al. (US 6,239,367 B1)	Ih (US 6,417,017 B1)
Jankowski (3,764,862)	Merrick et al. (5,148,243)
Sako (5,049,977)	Sawaya (5,083,189)
Sudo (5,198,684)	Takahashi (5,218,233).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ida M. Soward whose telephone number is 571-272-

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1845. The examiner can normally be reached on Monday - Thursday 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra V. Smith can be reached on 571-272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IMS

February 20, 2006

John M. Swartz
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